

**In the claims:**

Please amend claim 1 as follows:

1. (Amended) An ink drying system for high speed printing on a traveling sheet of material, the system being coupled to a source of pressurized gas and comprising:

B3 Sub C1  
a plurality of plenums disposed so as to extend over the sheet, said plenums each including an associated plurality of orifices spaced apart from one another so as to define respective drying portions thereof;

a corresponding plurality of fluid flow valves for controlling fluid communication between said plenums and the source of pressurized gas; and

a controller for controlling said valves based on the amount of ink deposited during printing.

Please add claims 9-14 added as follows:

B4 Sub C2  
9. An ink printing and drying system for high speed printing including a print head for depositing ink on a traveling sheet of material, the system being coupled to a source of pressurized gas and comprising:

a plurality of plenums associated with the print head, said plenums disposed so as to extend over the sheet and each of said plenums including an associated plurality of orifices spaced apart from one another so as to define respective drying portions thereof;

Sub C2

a corresponding plurality of fluid flow valves for controlling fluid communication between said plenums and the source of pressurized gas, one of said plurality of fluid flow valves corresponding to one of said plurality of plenums; and

a controller for controlling said valves, said controller being adapted to operate said valves independently of one another in response to information about said printing.

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10. The system of claim 9, wherein said drying portions provide substantially complete laterally extending coverage of the sheet, and wherein the drying portion of at least one of said plenums provides a substantially different range of laterally extending coverage of the sheet than at least one other of said plenums.

11. The system of claim 10, wherein at least two of said plenums are spaced substantially apart from one another in a direction of travel of the sheet by a predetermined distance, and wherein the drying portions of said plenums are each substantially laterally co-extensive.

12. The system of claim 9, wherein a quantity of the ink is defined by a spatially varying distribution, and wherein said controller is adapted, based on said distribution, to select one of said plurality of plenums to receive more of the pressurized gas than at least some of the other of said plenums.

13. The system of claim 10, wherein a quantity of the ink is defined by a spatially varying distribution, and wherein said controller is adapted, based on said distribution, to select one of said plurality of plenums to receive more of the pressurized gas than at least some of the other of said plenums.

14. The system of claim 11, wherein said controller is adapted to select one of said two plenums to receive a first predetermined amount of the pressurized gas at a first time, and to select the other of said two plenums to receive a second predetermined amount of the pressurized gas at a second time, wherein said second amount of the pressurized gas is predetermined based on said first amount, and wherein the difference between said first time and said second time is substantially equal to said distance divided by the speed of travel of the sheet.

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